Appl. No. 09/847,736

Amdt. dated October 31, 2003

PRELIMINARY AMENDMENT

Amendments to the Claims:

Please cancel claims 1-20, amend claims 21 and 24, and add new claims 25-30 as follows. This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-20. (Canceled)

21. A method for performing a medical procedure on a patient using a robotic arm, the robotic arm having an actuator coupled to an end effector by a robotic arm joint, the method comprising:

creating an opening in the patient at an opening location;

locating supporting a pivot port adjacent to the opening location in the patient with a pivot port support;

coupling a surgical instrument to the pivot port so that the surgical instrument is pivotable relative to the pivot port support by articulation of a pivot port joint; and,

moving the surgical instrument with a robotic arm to perform the medical procedure with pivoting movement of the surgical instrument about the pivot port by articulating the robotic arm joint of the robotic arm.

- 22. The method of claim 21, wherein the surgical instrument is inserted through an aperture of an adapter of the pivot port.
 - 23. The method of claim 21, wherein the patient has an open chest.
- 24. The method of claim 21, wherein the surgical instrument is inserted through an aperture of a ball joint of the pivot port, the ball joint comprising the pivot port joint.
- 25. (New) The method of claim 21, further comprising pivoting the surgical instrument about first and second pivotal axes of the pivot port when performing the medical procedure, wherein the pivot port support has a first joint defining the first pivotal axis and a

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second joint defining the second pivotal axis, the first and second axes intersecting along the surgical instrument.

- 26. (New) The method of claim 21, further comprising effecting both axially translation of the surgical instrument along a surgical instrument axis and rotation of the surgical instrument about the surgical instrument axis by articulating the robotic arm, wherein the pivot port accommodates the axial translation and the rotation by sliding engagement between the pivot port and the surgical instrument.
- 27. (New) The method of claim 21, wherein supporting of the pivot port comprises articulating a pivot port support linkage so as to position the pivot port adjacent the opening location and inhibiting articulation of the positioned pivot port support linkage during the medical procedure.
- 28. (New) The method of claim 27, further comprising positioning of the end effector and the pivot port by an end user and mechanically locking the pivot port support linkage.
- 29. (New) The method of claim 21, wherein the robotic arm joint comprises a passive joint, and wherein the pivot port restricts movement of the surgical instrument during the procedure to pivotal movement about the pivot port.
- 30. (New) The method of claim 21, wherein the robotic arm is adapted for minimally invasive surgery through a minimally invasive aperture by pivotal movement about the aperture, and wherein creating the opening in the patient comprises providing open surgical access.